

WHAT IS CLAIMED IS:

1. A golf ball comprising:

a substantially spherically shaped body having a dimpled outer surface;

a power source contained within the body;

5 a transmitter coupled to the power source and configured to emit an electromagnetic signal;

a shock actuated switching device contained within the body; and

a timing device configured to control transmission of the electromagnetic signal for a predetermined time period after actuation of the switching device.

10 2. The golf ball of Claim 1, wherein the timing device comprises:

a timer configured to turn the transmitter on upon actuation of the switching device and to turn the transmitter off a predetermined time after actuation of the switching device.

15 3. The golf ball of Claim 1, wherein the timing device comprises:

a first timer configured to turn the transmitter on a predetermined time after actuation of the switching device; and

a second timer configured to turn the transmitter off a predetermined time after actuation of the switching device.

20 4. A golf ball as in Claim 1, wherein the transmitter comprises at least one light emitting diode.

5. A golf ball as in Claim 1, wherein the transmitter comprises at least one antenna that emits a radio frequency electromagnetic signal.

6. A golf ball as in Claim 1, further comprising:

a modulator configured to modulate the transmitted electromagnetic signal.

7. A golf ball as in Claim 6, wherein the modulator comprises at least one of a frequency modulator, duration modulator, amplitude modulator, phase modulator, pulse code modulator, and a spread spectrum modulator.

8. The golf ball as in Claim 6, wherein the modulator is configured to modulate the electromagnetic signal with player identification information.

9. The golf ball as in Claim 1, wherein the power source is rechargeable.

10. The golf ball as in Claim 1, further comprising:

an outer cover at least partially transparent to the electromagnetic signal.

11. The golf ball as in Claim 1, wherein the electromagnetic signal is transmitted through an outer cover.

12. A golf ball comprising:

a substantially spherically shaped body having a dimpled outer surface;

a power source contained within the body; and  
means coupled to the power source for transmitting an electromagnetic signal for a  
predetermined time period in response to application of a shock to the golf ball.

5           13.     The golf ball of Claim 12, wherein the means for transmitting an  
electromagnetic signal comprises:

a switching means for responding to application of a shock to the golf ball; and  
a timer means for controlling transmission of the electromagnetic signal after actuation  
of the switching means.

10           14.     A golf ball as in Claim 12, further comprising:  
means for modulating the electromagnetic signal.

15           15.     A golf ball as in Claim 14, wherein the modulator means comprises at least one  
of a frequency modulator, duration modulator, amplitude modulator, phase modulator, pulse  
code modulator, or a spread spectrum modulator.

20           16.     The golf ball as in Claim 15, wherein the means for modulating the  
electromagnetic signal modulates the electromagnetic signal with player identification  
information.

17.     The golf ball as in Claim 12, wherein the power source is rechargeable.

18. The golf ball as in Claim 12, further comprising:

an outer cover at least partially transparent to the electromagnetic signal.

19. The golf ball as in Claim 12, wherein the electromagnetic signal is transmitted

5 through an outer cover.